AMENDMENTS TO THE CLAIMS:

Amend the claims as follows:

1. (Currently Amended) A method for frequency correction in a multicarrier system, comprising:

- receiving a signal ~~$(r_S[n])$~~ comprising a stream of data signals ~~$(r_{e,i}[k])$~~,
- calculating an estimated phase offset ~~$(\varphi_{est}[k])$~~ for each data signal ~~$(r_{e,i}[k])$~~ as a function of thereof,
- calculating a predicted phase offset ~~$(\varphi_A[k])$~~ for each data signal as a function of the estimated phase offset ~~$(\varphi_{est}[k])$~~ thereof and the estimated phase offset ~~$(\varphi_{est}[k-1])$~~ of a preceding one of the data signals ~~$(r_{e,i}[k-1])$~~, and
- correcting the received signal ~~$(r_S[n])$~~ by correcting a phase of each data signal ~~$(r_{e,i}[k])$~~ as a function of the predicted phase offset ~~$(\varphi_A[k])$~~ thereof.

2. (Currently Amended) The method according to claim 1, comprising:

- calculating the predicted phase offset ~~$(\varphi_A[k])$~~ further as a function of the predicted phase offset ~~$(\varphi_A[k-1])$~~ of the preceding one of the data signals ~~$(r_{C,i}[k-1])$~~, or
- calculating the predicted phase offset ~~$(\varphi_A[k])$~~ further as a function of the predicted phase offset ~~$(\varphi_A[k-1])$~~ of the preceding one of the data signals ~~$(r_{C,i}[k-1])$~~ and the predicted phase offset ~~$(\varphi_A[k-2])$~~ of one of the data signals ~~$(r_{C,i}[k-2])$~~ preceding the preceding one of the data signals ~~$(r_{C,i}[k-1])$~~.

3.(currently amended) The method according to claim 1~~ or 2~~, comprising:

- calculating a phase correction offset ~~$(\varphi_{corr,i}[k])$~~ for each data signal ~~$(r_{C,i}[k])$~~ as a function of the predicted phase offset ~~$(\varphi_A[k-1])$~~ of the preceding one of the data signals ~~$(r_{C,i}[k])$~~, and

- correcting each data signal ~~($r_{C,l}[k]$)~~ as a function of the phase correction offset ~~($\varphi_{corr,l}[k]$)~~ thereof.

4.(currently amended) The method according to ~~one of the preceding claims~~claim 1, comprising:
- separating each data signal ~~($r_{C,l}[k]$)~~ in at least two data signal samples ~~($r_{C,1}[k],\ldots,r_{C,Nfft}[k]$)~~,
- calculating a predicted sample phase offset ~~($\varphi_{S,1}[k],\ldots,\varphi_{S,Nfft}[k]$)~~ for each of said data signal samples ~~($r_{C,1}[k],\ldots,r_{C,Nfft}[k]$)~~ as a function of the predicted phase offset ~~($\varphi_A[k]$)~~ of a corresponding one of the data signals ~~($r_{C,l}[k]$)~~, and
- correcting the phase of each data signal ~~($r_{C,l}[k]$)~~ further by correcting a phase of each of the data signal samples ~~($r_{C,1}[k],\ldots,r_{C,Nfft}[k]$)~~ as a function of a respective one of the predected sample phase offsets ~~($\varphi_{S,1}[k],\ldots,\varphi_{S,Nfft}[k]$)~~.

5. (Currently Amended) The method according to claim 4, comprising:
- separating each data signal ($r_{C,l}[k]$) such that a first of the data signal samples ($r_{C,1}[k]$) represents the beginning of the corresponding one of the data signals ($r_{C,l}[k]$).

6. (Currently Amended) The method of claim 4~~ or 5,~~ comprising:
- calculating a sample phase correction offset ~~($\varphi_{S,1}[k]\cdot 1,\ldots,\varphi_{S,Nfft}[k]\cdot N_{fft}$)~~ for each of the data signal samples ~~($r_{C,1}[k],\ldots,r_{C,Nfft}[k]$)~~ as a function of the predicted sample phase offset ~~($\varphi_{S,1}[k],\ldots,\varphi_{S,Nfft}[k]$)~~ and the predicted phase offset ~~($\varphi_A[k]$)~~ of the corresponding one of the data signal ~~($r_{C,l}[k]$)~~, and
- correcting the phase of each data signal ~~($r_{C,l}[k]$)~~ by correcting the phase of each of the data signal samples ~~($r_{C,1}[k],\ldots,r_{C,Nfft}[k]$)~~ thereof as a function of a corresponding one of the phase correction offsets ~~($\varphi_{corr,l}[k]$)(□corr,l□k□)~~ and a corresponding one of the sample phase correction offsets ~~($\varphi_{S,1}[k]\cdot 1,\ldots,\varphi_{S,Nfft}[k]\cdot N_{fft}$)~~.

7. (Currently Amended) The method of ~~one of the claims 4 to 6~~claim 4, comprising:

- calculating each predicted sample offset ~~($\varphi_{S,1}[k],\ldots,\varphi_{S,Nfft}[k]$)~~ as a function of the predicted phase offset ~~($\varphi_A[k]$)~~ of the corresponding one of the data signals ~~($r_{C,l}[k]$)~~ and a measure being indicative of a distance (x_{k+1}) between a main phase reference point ~~(R_{Ce})~~ for the received signal ~~($r_S[n]$)~~ and a phase reference point ~~(R_{Sk}, S_{Sk})~~ for the preceding one of the data signals ~~($r_{C,l}[k-1]$)~~.

8. (Currently Amended) The method of ~~one of the preceding claims~~claim 1, comprising:

- receiving a preamble signal ~~(C64)~~ preceding the data signals ~~($r_{C,l}[k]$)~~,
- calculating an estimated phase arc ~~($H_m[k]$)~~ as a function of the preamble signal ~~(C64)~~, and
- calculating the estimated phase offset ~~($\varphi_{est}[1]$)~~ of the data signal ~~($r_{C,l}[1]$)~~ subsequent the preamble signal ~~(C64)~~ as a function thereof and the estimated phase arc ~~($H_m[k]$)~~.

9. (Currently Amended) The method of claim 7, comprising:

- defining the main phase reference point ~~(R_{Ce})~~ to be indicative of the middle of the preamble signal ~~(C64)~~ in the time domain, and/or
- defining the phase reference points ~~(R_{SK})~~ to be indicative of the beginning ~~(S_{Sk})~~ of the corresponding data signal ~~($r_{Cl}[k]$)~~ in the time domain.

10. (Currently Amended) The method according to claim 9, comprising:

- defining a phase reference point ~~(R_{S1})~~ for the data signal ~~($R_{C,l}[1]$)~~ subsequent the preamble signal ~~(C64)~~ to be indicative of the middle ~~(R_{S1})~~ of the subsequent data signal ~~($r_{C,l}[1]$)~~ in the time domain.

11. (Currently Amended) The method according to ~~one of the claims 4 to 10~~claim 4, comprising:
- separating each data signal ~~($r_{C,l}[k]$)~~ in the data signal samples ~~($r_{C,1}[k],\ldots, r_{C,Nfft}[k]$)~~ by means of sampling the received signal ~~($r_S[n]$)~~ or each data signal ~~($r_{C,l}[k]$)~~.

12.(currently amended) The method according to ~~one of the preceding claims~~claim 1, comprising:
- receiving an orthogonal frequency division multiplex ~~(OFDM)~~ signal as the received signal ~~($r_S[n]$)~~, wherein a stream of symboles thereof represent the stream of data signals ~~($r_{C,l}[k]$)~~, and at least one preamble symbol thereof represent the preamble signal ~~(C64)~~.

13.(currently amended) An apparatus for frequency correction in a multicarrier system, comprising:
- receiving means ~~(2, 4)~~ for receiving a signal comprising a stream of data signals,
- a frequency correction means ~~(6)~~ for frequency correction of each data signal in response to a corresponding predicted phase offset, and
- a phase locked loop means ~~(6,. 24)~~ for generating the predicted phase offsets, comprising
-- a phase discrimination means ~~(12, 14, 16)~~ for generating an estimated phase offset for each data signal as a function thereof,
-- a filter means ~~(18, 20, 22)~~ for receiving estimates phase offsets and generating the predicted phase offset for each data signal as a function of the estimated phase offset thereof and the estimated phase offset of a preceding one of the data signals.

14.(currently amended) The apparatus according to claim 13, characterized by:

- the filter means ~~(18, 20, 22)~~ comprising a first order loop filter means ~~(18)~~ for receiving the estimated phase offsets and an integrator ~~(20)~~ for receiving outputs of the first order loop filter means ~~(18)~~.

15.(currently amended) The apparatus according to claim 14, characterized by:

- a delay means ~~(22)~~ for receiving outputs of the integrator ~~(20)~~.

16.(currently amended) The apparatus according to ~~one of the claims 13 to 15~~claim 13, characterized by:

- a calculation means ~~(24)~~ for calculating predicted sample phase offsets in response to the predicted phase offsets.

17.(currently amended) The apparatus according to claim 16, characterized by:

- the calculation means ~~(24)~~ being coupled to the filter means ~~(18, 20, 22)~~.

18.(currently amended) The apparatus according to claim 17, characterizes by:

- the calculation means ~~(24)~~ being coupled to the delay means ~~(22)~~.

19.(currently amended) The apparatus according to ~~one of the claims 13 to 18~~claim 13, characterized by:

- the frequency correction means ~~(6)~~ being coupled to the filter means ~~(18, 20, 22)~~ and the calculation means ~~(24)~~.

20.(currently amended) The apparatus according to ~~one of the claims 13 to 19~~claim 13, characterized by:

- the frequency correction means (6) and the filter means (18, 20, 22) being adapted to be operated ~~according to the method of one of the claims 1 to 12~~.

21.(currently amended) A transceiver for wireless communication, characterized by the apparatus according to ~~one of the claims 13 to 20~~claim 13.

22.(currently amended) A transceiver for wireless communication, characterized by being adapted to be operated by the method according to ~~one of the claims 1 to 12~~claim 1.